

United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge	Matthew F. Kennelly	Sitting Judge if Other than Assigned Judge	
CASE NUMBER	00 CR 85	DATE	2/1/2002
CASE TITLE	USA vs. Rothberg		

MOTION: [In the following box (a) indicate the party filing the motion, e.g., plaintiff, defendant, 3rd party plaintiff, and (b) state briefly the nature of the motion being presented.]

MOTION:

10. The following table summarizes the results of the study.

DOCKET ENTRY:

- (1) Filed motion of [use listing in "Motion" box above.]

(2) Brief in support of motion due _____.
(3) Answer brief to motion due _____. Reply to answer brief due _____.
(4) Ruling/Hearing on _____ set for _____ at _____.
(5) Status hearing[held/continued to] [set for/re-set for] on _____ set for _____ at _____.
(6) Pretrial conference[held/continued to] [set for/re-set for] on _____ set for _____ at _____.
(7) Trial[set for/re-set for] on _____ at _____.
(8) [Bench/Jury trial] [Hearing] held/continued to _____ at _____.
(9) This case is dismissed [with/without] prejudice and without costs[by/agreement/pursuant to]
 FRCP4(m) General Rule 21 FRCP41(a)(1) FRCP41(a)(2).
(10) [Other docket entry] Enter Memorandum Opinion and Order. For the reasons set forth on the attached order, the Court has determined that the value of the infringing items for purposes of Guidelines §B5.3 is \$1,424,640. Defendants' Daubert motion (0-1 is denied as moot.)
(11) [For further detail see order attached to the original minute order.]

	No notices required, advised in open court.		Document Number
	No notices required.	number of notices	
	Notices mailed by judge's staff.		
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IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

RECEIVED
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UNITED STATES OF AMERICA

)
vs.
)

ROBIN ROTHBERG, et al.

)
Case No. 00 CR 85
)

MEMORANDUM OPINION AND ORDER

MATTHEW F. KENNELLY, District Judge:

The defendants in this case were charged pursuant to 18 U.S.C. §371 with conspiracy to commit copyright infringement in violation of 17 U.S.C. §506(a)(2) and 18 U.S.C. §2319(c)(1). The indictment alleged that they were members of a computer software piracy group called “Pirates with Attitudes,” an organization “dedicated to the illegal reproduction and distribution of copyrighted software over the Internet, for the use and benefit of members of PWA, and of those persons to whom PWA members further distributed that software.” Indictment ¶ 2. The group was alleged to have an elaborate hierarchy and members worldwide. According to the indictment, PWA stored libraries of pirated software on several File Transfer Protocol sites, including one called Sentinel, which came on line in 1995 and was in operation until January 2000. Access to the Sentinel site was controlled by the senior members of PWA, and members with access were able to download pirated computer programs to their own computers and distribute them to others.

The computer hardware used to operate the Sentinel site was located at the University of Sherbrooke in Sherbrooke, Canada. In January 2000, this equipment was seized by the FBI, with the cooperation and assistance of Canadian law enforcement personnel. The only software

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programs that remained on Sentinel as of the date of the seizure were those that had been uploaded in late 1999 and early 2000; programs uploaded earlier evidently had been deleted as obsolete or for other reasons. Analysis by an FBI computer specialist produced a list of approximately 5,000 software programs that were still on the Sentinel site at the time of the seizure. Based on this, the government originally estimated the retail value of the programs at just over \$1 million.

Thirteen of the defendants pled guilty, and one, Christian Morley, was found guilty after a jury trial. The Court set sentencing dates for all of the defendants and, upon learning that there was a dispute concerning the value of the infringing items (a significant sentencing issue), scheduled an evidentiary hearing on that point.

In its pre-hearing memorandum, the government contended that the infringing items were actually worth over \$10 million. This new position resulted from work done in preparation for Morley's trial. The government had asked another FBI computer specialist, Christopher Hamblett, to conduct further analysis of the Sentinel computer. Hamblett developed a program that permitted him to extract data identifying program uploads as far back as January 1998. He determined that from that date through January 2000, over 54,000 software programs had been uploaded to the Sentinel site. Hamblett also developed a calculation which the government maintains enabled him to estimate the number of complete and uncorrupted programs (not including "beta" (test) versions of programs) that had been uploaded, yielding a net total of 34,582. The government's position on valuation was based on Hamblett's analysis and extrapolation from evidence concerning the claimed retail value of a significant percentage of the programs found on the Sentinel site at the time of the seizure.

A number of the defendants who had pled guilty objected to the government's change of position, arguing that the government should be precluded from arguing for a figure higher than the \$1 million-plus valuation estimate that it had previously advanced. The Court rejected this argument but afforded the defendants who had pled guilty the opportunity to withdraw his or her guilty plea and proceed to trial. *United States v. Rothberg*, No. 00 CR 85, 2000 WL 1654758 (N.D. Ill. Dec. 20, 2001). Following that ruling, each of those defendants, through counsel, advised the Court that they did not wish to withdraw their guilty pleas. The Court now determines the valuation issue.

The parties agree that sentencing is governed by the 1998 version of the Sentencing Guidelines. Under the provision governing copyright infringement offenses, Guideline §2B5.3, the base offense level is 6, and this is adjusted upward using the table in §2F1.1 "if the retail value of the infringing items exceeded \$2,000." Application Note 1 explains that "infringing items" means "the items that violate the copyright or trademark laws (not the legitimate items that are infringed upon)." The Application Note is authoritative and constitutes a binding interpretation of Guideline §2B5.3. See *Stinson v. United States*, 508 U.S. 36, 37-39 (1993); *United States v. Eyoum*, 84 F.3d 1004, 1007 (7th Cir. 1996). In this case the infringing items are the copyrighted software uploaded to PWA's sites and each copy downloaded by a user. The government has chosen, however, to use only uploads, and not downloads, as the basis for its valuation position. In other words, it proposes to count only once each software program that was allegedly pirated by PWA; it does not seek to include in the calculation downloads of that program by PWA members or others.

We begin by determining the number of programs to include in the calculation.

Christopher Hamblett, the government's witness at the evidentiary hearing, testified that he developed a method for extracting information from the "log" files that remained on the Sentinel server at the time of the seizure. These files purported to record information regarding uploading and downloading activity, and from them Hamblett was able to identify what files had been uploaded to the Sentinel site, and when. Hamblett testified that he looked only at activity between January 1, 1998 and January 13, 2000 (the seizure date); he filtered the results so as to include only successful file transfers to the Sentinel site and to exclude transfers of certain types of files that could not represent software programs (e.g., files with names including extensions such as .nfo, .diz, .all, .txt, .bak, as well as any "log" files). He also excluded any files whose name contained the word "beta" (on the theory that these likely were pre-release versions of software programs), "patch," "missing," "package," or "request." Finally, Hamblett filtered the information to exclude any duplicate file names. This process resulted in a count of 54,761 uploads, which according to the government represents the number of distinct software programs uploaded to the Sentinel site during the period in question. Though defendants have contested this figure, the Court finds the government's evidence was sufficiently reliable to form the starting point for a Sentencing Guideline calculation.

The government does not contend, however, that all 54,761 uploads were actually functioning versions of computer programs. Though there obviously was no way to examine the files (90% of which no longer existed at the time of the seizure), Hamblett conceded that it was likely that a significant number of the programs uploaded to Sentinel contained flaws that would prevent them from being fully functioning. He developed a calculation, which he termed a "logarithmic curve," to attempt to account for non-functioning programs uploaded to the Sentinel

site. Application of this calculation, Hamblett testified, reduced the estimated number of functioning programs uploaded onto the Sentinel site to 34,582.

Hamblett's testimony and his reports regarding how he developed the logarithmic curve were entirely conclusory. The reports provided no information regarding what the logarithmic curve represented or how it was developed, and on its direct examination of Hamblett the government did nothing to enlighten the Court on this score. On cross-examination, Hamblett stated that his calculation was based on information regarding transmission error rates that he had obtained from companies that maintain telephone lines. But that was the sum and substance of his explanation. Hamblett never explained how he had derived the calculation or why it should be considered a reasonable basis for estimating the number of functioning programs.¹ In the final analysis, the Court can say only that Hamblett developed a "fudge factor"; we have no confidence that it was a reasonable means of reducing the admittedly over-inclusive upload figure to anything that reasonably approximates the actual number of functioning programs that the Sentinel site contained. For these reasons, we cannot and will not rely upon Hamblett's proposal for reducing the overall upload figure to a number of functioning programs.

Defendants' motion to strike this aspect of Hamblett's calculation pursuant to *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993), is therefore denied as moot.

The government argues that if Hamblett's reduction is not considered, it actually leaves the defendants worse off than they were before – with a figure of 54,761 programs rather than 34,582. The Court does not agree; it is entirely possible that the uploaded files included more

¹ The government's post-hearing effort to shore up Hamblett's testimony, by providing information downloaded from Internet sites concerning logarithmic curves generally, misses the point; none of this information explains what Hamblett actually did in this case.

non-functioning programs than Hamblett estimated. Where, then, does our rejection of Hamblett's logarithmic curve leave us? Though the law does not require valuation to be proved with precision for Sentencing Guidelines purposes, *cf. United States v. Scott*, 250 F.3d 550, 552 (7th Cir. 2001) (discussing issue of loss under former Guideline §2F1.1), we must be able to make a reasonable estimate. Cf. Guideline §2F1.1, Application Note 9 (1998 version). We cannot do this if we use the 54,761 figure as a starting point. As we have noted, that figure is admittedly over-inclusive, and any attempt by the Court to reduce it to a realistic estimate of functioning programs would be nothing more than a shot in the dark. Thus the government's failure to provide the Court with a basis to make a reasonable estimate of the number of *functioning* programs uploaded between January 1998 and January 2000 amounts to a failure to meet its burden of proof with regard to its proposed valuation figure. *See, e.g., United States v. Smith*, 210 F.3d 760, 761 (7th Cir. 2000) (government has burden of proving by preponderance of evidence factors which increase base offense level).

The only reasonable alternative available to the Court is to use as the basis for the value calculation the number of functioning programs that remained on the Sentinel site at the time of the seizure – a figure which is easier to estimate – and leave it to the government to decide whether to seek an upward departure on the grounds that this understates the seriousness of the offense. Cf. Guideline §2F1.1, Application Note 11 (1998 version).

There were 5,046 separate directories on the Sentinel site at the time of the seizure. When these were filtered in the same manner described earlier, the result was 3,947 directories that contained computer programs. The FBI tested 71 programs from the site and found that 67, or 94% of them, functioned in the same manner as the retail version of the programs. Though the

selection of the 71 programs was not random, *see* Government's Submission Regarding the Loss [sic] Calculation, p. 5, the Court finds that it provides a reasonable basis for determining an estimate of the actual number of fully functioning programs on the Sentinel site at the time of the seizure. We will base our value determination on that figure: 94% of 3,947, or 3,710 programs.

It might be questioned why the Court does not simply use the same calculation with respect to the figure for the total number of uploads from the Sentinel site from January 1998 through January 2000. The reason is that it is logical to expect that the programs that were kept on the site were the ones that worked. One can reasonably expect that non-functioning programs were removed from the site once the defect was discovered. Thus the total number of uploads over the two year period likely contained far more non-functioning programs than the much smaller set of programs that remained on the site as of January 2000. In short, the 3,947 figure and the 54,761 figure are not comparable.

The next issue is the determination of the value of the 3,710 infringing items. The government obtained the retail prices for 2,200 of the 3,947 software titles found to be on the site at the time of the seizure. After some revisions and corrections, it derived an average price of \$384 per program. The Court cannot say that this figure is 100% accurate for the 2,200 programs that the government investigated; defendants pointed out a number of errors, and though the government took these into account in calculating the \$384 average price, it is conceivable that there were other errors. But we are satisfied that the estimate is reasonably accurate such that we can rely upon it for purposes of the Sentencing Guidelines calculation.

Defendants argue that because PWA did not sell the infringing software, the value for Guidelines purposes is zero. The Court disagrees. First of all, the Guideline does not direct the

Court to determine the retail *price*; rather it requires us to determine the retail *value*. The two concepts are not the same; the fact that PWA did not charge a fee does not mean that the fully functioning software that it distributed was worthless. Moreover, PWA did not distribute its pirated wares to all comers, free of charge; rather distribution was limited to members of the group. To become a member of the group with the right to download software from Sentinel and other PWA sites, an individual had to contribute something of value, either services (such as providing, "cracking," or repackaging software for distribution), or goods (certain defendants purloined computer hardware from their employer and shipped it to Canada to be used in running the site). These facts are more than sufficient to show that the pirated software had value, even if those who downloaded it were not charged a fee.

The question, however, is what the value is. We cannot simply adopt the retail price of the legitimate software items without considering other factors; the 1998 version of Guideline §2B5.3 and Application Note 1 clearly do not permit this.² As the Fifth Circuit noted in *United States v. Kim*, 963 F.2d 65, 68 (5th Cir. 1992), "the clear and unambiguous phrase 'retail value of the infringing items' refers to the counterfeit merchandise. This phrase does not, by its terms, refer to the retail value of genuine merchandise – the items subject to infringement." *Accord, United States v. Bao*, 189 F.3d 860, 867 (9th Cir. 1999) (citing *Kim*). But that does not mean that the retail price of the genuine article is irrelevant. In *Kim* itself, the Fifth Circuit concluded that the district court had not erred in relying on the retail price of the genuine items in assessing the value of the counterfeit items in that case, due to the absence of evidence regarding the price at

² Guideline §2B5.3 was amended, effective May 1, 2000, to provide that the value is to be determined by using the retail value of the infringed item. The parties agree that the new version does not apply in this case.

which the latter were sold and "the difficulty of calculating the 'retail price of the counterfeit items.'" *United States v. Cho*, 136 F.3d 982, 985 (5th Cir. 1998) (quoting *Kim*, 963 F.2d at 69). See also *Bao*, 189 F.3d at 867 (retail value of genuine merchandise may be relevant in determining retail value of infringing items).

In this case we lack any solid evidence of the value of the infringing items other than the retail price of the genuine articles. Defendants have offered evidence garnered from reports of other cases in which counterfeit software was sold on the black market. But even assuming some figure, or range of figures, from those cases properly could be applied in this one, black market pricing is not always a proper surrogate for actual value. In this case the programs were fully-functioning versions of the products sold at retail, and they were mass-distributed, or at least made available for mass distribution, by PWA. The only significant differences between PWA's programs and the genuine articles were the unavailability of a manual, technical support, and a warranty. There is no basis to believe, however, that these affected the value of the programs to PWA's downloaders, particularly in view of the availability of "help" files on the programs themselves.

The law is clear that when there is an absence of other reliable evidence concerning the value of the infringing item, and the item is materially indistinguishable from the genuine article, the Court may adopt the retail price of the genuine item as the value of the infringing item. *Cho*, 136 F.3d at 985; *Kim*, 963 F.2d at 69-70; *United States v. Larracuente*, 952 F.2d 672, 674-75 (2d Cir. 1992); *United States v. DeFreitas*, No. 98 CR 1004, 2000 WL 763850, at *1-2 (S.D.N.Y. June 13, 2000). That is the case here. For these reasons, the Court will use the \$384 average price determined by the government for the 2,200 programs that it reviewed as the average price

for the full set of the infringing items. *See United States v. Freitag*, 230 F.3d 1019, 1025 (7th Cir. 2000) (permitting court making Sentencing Guidelines calculation to extrapolate from a sampling of the overall universe of items in question). We therefore find that the value of the infringing items for purposes of Guideline §2B5.3 is \$1,424,640 (3,710 times \$384).

Conclusion

For the reasons stated above, the Court has determined that the value of the infringing items for purposes of Guideline §2B5.3 is \$1,424,640. Defendants' *Daubert* motion [item 0-1] is denied as moot.


MATTHEW F. KENNELLY
United States District Judge

Date: February 1, 2002